

**WHAT IS CLAIMED IS:**

- 1           1.       A machine-implemented caller interface method, comprising:  
2           receiving a sequence of recognized characters beginning with a first recognized  
3           character and ending with a last recognized character;  
4           selecting successive characters one at a time from the recognized character  
5           sequence in order beginning with the first recognized character;  
6           for each selected character, constructing a current potential match set of potential  
7           character string matches by  
8                 appending one or more characters selected from a set of misrecognized  
9                 characters including the selected character to each potential  
10                character string match in a prior potential match set constructed for  
11                a preceding selected character, if any, and  
12                deleting from the current potential match set potential character string  
13                matches missing from a list of reference character strings; and  
14           transmitting for presentation to a caller a reference data item corresponding to the  
15           potential character string match in a current potential match set containing one a single  
16           potential character string match after non-matching potential character string matches  
17           have been deleted.
- 1           2.       The method of claim 1, wherein the sequence of recognized characters is  
2           received from a speech recognition system.
- 1           3.       The method of claim 2, further comprising transmitting to the speech  
2           recognition system a grammar identifying characters to be recognized.
- 1           4.       The method of claim 1, wherein each misrecognized character set contains  
2           at least one character likely to be misrecognized for the corresponding selected character  
3           by a speech recognition system.
- 1           5.       The method of claim 1, wherein deleting comprises comparing potential  
2           character string matches and reference character strings of equal character length.
- 1           6.       The method of claim 1, wherein the misrecognized character sets and the  
2           reference character strings are stored in a single document file.

1           7.     The method of claim 6, wherein each list includes a respective table  
2     containing reference character strings of equal character length, and different tables  
3     contain reference character strings of different respective character length.

1           8.     The method of claim 1, further comprising transmitting for presentation to  
2     the caller reference data items corresponding to the potential character string matches in  
3     the current potential match set constructed after all recognized characters in the sequence  
4     have been selected.

1           9.     The method of claim 1, further comprising transmitting to the caller a  
2     message prompting the caller to spell at least a portion of an identifier of a requested  
3     reference data item.

1           10.    The method of claim 9, wherein after all recognized characters in the  
2     sequence have been selected and multiple potential character string matches remain in the  
3     current potential match set, further comprising transmitting to the caller a message  
4     prompting the caller to spell an additional portion of the identifier of the requested data  
5     item.

1           11.    A machine-readable medium storing machine-readable instructions for  
2     causing a machine to:  
3                receive a sequence of recognized characters beginning with a first recognized  
4     character and ending with a last recognized character;  
5                select successive characters one at a time from the recognized character sequence  
6     in order beginning with the first recognized character;  
7                for each selected character, construct a current potential match set of potential  
8     character string matches by  
9                appending one or more characters selected from a set of misrecognized  
10               characters including the selected character to each potential  
11               character string match in a prior potential match set constructed for  
12               a preceding selected character, if any, and  
13               deleting from the current potential match set potential character string  
14               matches missing from a list of reference character strings; and  
15               transmit for presentation to a caller a reference data item corresponding to the  
16     potential character string match in a current potential match set containing one a single

17 potential character string match after non-matching potential character string matches  
18 have been deleted.

1 12. The medium of claim 11, further comprising machine-readable  
2 instructions for causing a machine to transmit to the speech recognition system a  
3 grammar identifying characters to be recognized.

1 13. The medium of claim 11, wherein each misrecognized character set  
2 contains at least one character likely to be misrecognized for the corresponding selected  
3 character by a speech recognition system.

1 14. The medium of claim 11, further comprising machine-readable  
2 instructions for causing a machine to compare potential character string matches and  
3 reference character strings of equal character length.

1 15. The medium of claim 11, wherein the misrecognized character sets and the  
2 reference character strings are stored in a single document file.

1 16. The medium of claim 15, wherein each list includes a respective table  
2 containing reference character strings of equal character length, and different tables  
3 contain reference character strings of different respective character length.

1 17. The medium of claim 11, further comprising machine-readable  
2 instructions for causing a machine to transmit for presentation to the caller reference data  
3 items corresponding to the potential character string matches in the current potential  
4 match set constructed after all recognized characters in the sequence have been selected.

1 18. The medium of claim 11, further comprising machine-readable  
2 instructions for causing a machine to transmit to the caller a message prompting the caller  
3 to spell at least a portion of an identifier of a requested reference data item.

1 19. The medium of claim 18, further comprising machine-readable  
2 instructions for causing a machine to transmit to the caller a message prompting the caller  
3 to spell an additional portion of the identifier of the requested data item after all  
4 recognized characters in the sequence have been selected and multiple potential character  
5 string matches remain in the current potential match set.

1           20.     The medium of claim 11, wherein the machine-readable instructions are  
2 implemented in a voice-based extensible markup language.

1           21.     A caller interface system, comprising a voice browser programmed to:  
2           receive a sequence of recognized characters beginning with a first recognized  
3 character and ending with a last recognized character;  
4           select successive characters one at a time from the recognized character sequence  
5 in order beginning with the first recognized character;  
6           for each selected character, construct a current potential match set of potential  
7 character string matches by  
8                 appending one or more characters selected from a set of misrecognized  
9                         characters including the selected character to each potential  
10                        character string match in a prior potential match set constructed for  
11                        a preceding selected character, if any, and  
12                 deleting from the current potential match set potential character string  
13                        matches missing from a list of reference character strings; and  
14           transmit for presentation to a caller a reference data item corresponding to the  
15 potential character string match in a current potential match set containing one a single  
16 potential character string match after non-matching potential character string matches  
17 have been deleted.

1           22.     The system of claim 21, further comprising a speech recognition system  
2 operable to transmit the sequence of recognized characters to the voice browser.

1           23.     The system of claim 22, wherein the voice browser is programmed to  
2 transmit to the speech recognition system a grammar identifying characters to be  
3 recognized.

1           24.     The system of claim 21, wherein each misrecognized character set  
2 contains at least one character likely to be misrecognized for the corresponding selected  
3 character by a speech recognition system.

1           25.     The system of claim 21, wherein the voice browser is programmed to  
2 compare potential character string matches and reference character strings of equal  
3 character length.

1           26.     The system of claim 21, wherein the misrecognized character sets and the  
2 reference character strings are stored in a single document file loadable by the voice  
3 browser.

1           27.     The system of claim 26, wherein each list includes a respective table  
2 containing reference character strings of equal character length, and different tables  
3 contain reference character strings of different respective character length.

1           28.     The system of claim 21, wherein the voice browser is programmed to  
2 transmit for presentation to the caller reference data items corresponding to the potential  
3 character string matches in the current potential match set constructed after all recognized  
4 characters in the sequence have been selected.

1           29.     The system of claim 21, the voice browser is programmed to transmit to  
2 the caller a message prompting the caller to spell at least a portion of an identifier of a  
3 requested reference data item.

1           30.     The system of claim 29, the voice browser is programmed to transmit to  
2 the caller a message prompting the caller to spell an additional portion of the identifier of  
3 the requested data item after all recognized characters in the sequence have been selected  
4 and multiple potential character string matches remain in the current potential match set.

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